

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 6 of 15

**-- REMARKS --**

**A. Claims 21 and 26 were rejected under 35 U.S.C. §103(a) as unpatentable over Cairns in view of Schubert**

The §103(a) rejection of claims 21 and 26 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

Claim 21 requires that at least one road input is based on global positioning coordinates. This element is neither disclosed, nor taught or suggested by Cairns, as noted by the Examiner. The Examiner relies upon Schubert for such a teaching. However, at most, Schubert teaches that the current position of the vehicle and a geo-referenced map can estimate the bumpiness level that the vehicle will encounter. *See*, column 18, lines 32-36 of Schubert.

Additionally, there can be no motivation to combine the references, as Cairns unequivocally teaches away from the combination. As Cairns teaches in ¶12, the term vehicle conditions “is intended to *exclude* characteristics not related to the physical mechanical/electrical condition of the vehicle” (emphasis added). The Examiner’s allegation that road inputs are a physical or mechanical condition of the vehicle is specious – a road input is, at most, a condition of a *road*, not a *vehicle* traveling on the road. Since Cairns explicitly teaches that the term is specifically intended to exclude characteristics not related to the condition of the vehicle, the Examiner cannot combine these references.

Applicant specifically traverses the Examiner’s allegation that as “to claim 26, obviously a change in global coordinates which results in a road type (bumpiness) change (determined by geographical information map 350), would adjust the noise suppression algorithm appropriately.” The Examiner is using Applicant’s disclosures against her and using impermissible hindsight. No such change is truly “obvious”. Furthermore, as a matter of law, the Examiner’s allegations fail to even properly allege a case of unpatentability under 35 U.S.C. §103(a) based on “obviously”.

Withdrawal of the rejections to claims 1, 5, 10, 12, 16, and 21 is requested.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 7 of 15

**B. Claims 23 and 27 were rejected under 35 U.S.C. §103(a) as unpatentable over Cairns in view of Schubert in view of Venkatesh**

The §103(a) rejection of claims 23 and 27 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

As noted above, there can be no motivation to combine the references, as Cairns unequivocally teaches away from the combination. As Cairns teaches in ¶12, the term vehicle conditions “is intended to *exclude* characteristics not related to the physical mechanical/electrical condition of the vehicle” (emphasis added). The Examiner’s allegation that an external vehicle climate is a physical or mechanical condition of the vehicle is specious – an external vehicle climate is not a condition of the *vehicle*, but rather the environment experienced by the vehicle while traveling on a road. Since Cairns explicitly teaches that the term is specifically intended to exclude characteristics not related to the *condition of the vehicle*, the Examiner cannot combine these references.

Further, Applicant specifically traverses the statement that one “would have been motivated to use external climate since it relates to a physical condition of the vehicle.” First, external climate does *not* relate to the physical condition of the vehicle. Second, Venkatesh teaches a volume control system, rather than a method for tuning a hands-free system in a mobile vehicle. At most, Venkatesh teaches methods to ensure that enunciated sounds are audible over the sound within a vehicle, rather than methods to tune a hands free system to increase comprehension of spoken commands. There can be no motivation to combine these cases.

Applicant specifically traverses the Examiner’s allegation that as “to claim 26, obviously a change in global coordinates which results in a road type (bumpiness) change (determined by geographical information map 350), would adjust the noise suppression algorithm appropriately.” The Examiner is using Applicant’s disclosures against her and using impermissible hindsight. No such change is truly “obvious”. Furthermore, as a matter of law, the Examiner’s allegations fail to even properly allege a case of unpatentability under 35 U.S.C. §103(a) based on “obviously”.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 8 of 15

Additionally, claims 23 and 27 depend directly from claim 21 and are therefore allowable for at least the same reasons as claim 21.

Withdrawal of the rejections to claims 23 and 27 is requested.

**C. Claims 21 and 26 were rejected under 35 U.S.C. §103(a) as unpatentable over Stankewitz in view of Schubert**

The §103(a) rejection of claims 21 and 26 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims, and there must be a motivation to combine the references.

There can be no motivation to combine a method for suppressing disturbing noise and an apparatus for facilitating reduction of vibration in a work vehicle having an active cab suspension system. The rationale to modify or combine the prior art may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. MPEP §2144, *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also *In re Korzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (setting forth test for implicit teachings); *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) (discussion of reliance on legal precedent); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); *Ex parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Inter. 1985) (examiner must present convincing line of reasoning supporting rejection); and *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning). The Examiner properly does not cite to any express or implied teachings in either Stankewitz or Schubert, as neither reference, alone or in combination, provides any such teaching. Therefore, the Examiner must be attempting to rely on either knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. The Examiner makes no citation to any established

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 9 of 15

scientific principles, or precedent established by prior case law, and therefore can only be relying on knowledge generally available to one of ordinary skill in the art.

However, the Examiner provides no evidence of the ordinary skill in the art. In a case such as this, where the Examiner is improperly attempting to combine a vehicle suspension reference with a reference relating to noise suppression, the Examiner's omission of any details regarding the level of skill of one in the art is especially telling. The mere fact that references *can* be combined is not sufficient to establish obviousness under 35 U.S.C. §103(a). *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990), MPEP §2143.01.

Furthermore, Stankewitz teaches away from the combination with Schubert. Stankewitz teaches the desirability of a method that shortens the period of time for creating optimum call conditions and *does not necessitate any major technological or computational expense*. See, ¶5 of Stankewitz (emphasis added). The combination with Schubert, requiring computations for the current position of the vehicle and a geo-referenced map would then necessitate a major technological or computation expense (providing equipment to determine a current position, such as a GPS unit, and compare that position to a geo-referenced map) would defeat the purpose of Stankewitz. Any such modification would destroy the principle of operation of Stankewitz by requiring additional equipment and computations. See, MPEP §2143.01, *In Re Ratti*, 270 F.2d 810 (CCPA 1959).

Notably, the structure and function of Stankewitz and Schubert differ and are dissimilar. There is little structural similarity and functional overlap between the method of Stankewitz and apparatus of Schubert, and any similarities are not readily apparent. See, MPEP 2141.01(a). Indeed, the PTO classification for each reference is different, and this difference provides *evidence* that the combination of references is improper. As the Examiner has provided no evidence that the combination of references is proper, this evidence must overwhelm any mere allegations from the Examiner.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 10 of 15

Furthermore, there must be a reasonable expectation of success from the combination. MPEP §2143.02. Stankewitz teaches the desirability of a method that shortens the period of time for creating optimum call conditions and does not necessitate any major technological or computational expense. See, ¶5 of Stankewitz. The combination with Schubert, requiring computations for the current position of the vehicle and a geo-referenced map would then necessitate a major technological or computation expense (providing equipment to determine a current position, and compare that position to a geo-referenced map). These computations could then defeat the desire to shorten the period of time for creating optimum call conditions. These computations could then defeat the success of the combination – at the very least, one of ordinary skill in the art could be unsure of the likelihood of success of the combination, and the *Examiner has not provided any evidence* to the contrary. At the very least, one of ordinary skill in the art would recognize that the addition of a GPS system to the Stankewitz method would increase the technological expense, and would reduce the expectation of success.

Applicant specifically traverses the Examiner's allegation that as "to claim 26, obviously a change in global coordinates which results in a road type (bumpiness) change (determined by geographical information map 350), would adjust the noise suppression algorithm appropriately." The Examiner is using Applicant's disclosures against her and using impermissible hindsight. No such change is truly "obvious". Furthermore, as a matter of law, the Examiner's allegations fail to even properly allege a case of unpatentability under 35 U.S.C. §103(a) based on "obviously".

Claim 26 depends directly from claim 21 and is therefore patentable over the combination of Stankewitz and Schubert for at least the same reasons.

Withdrawal of the rejections to claims 21 and 26 is requested.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 11 of 15

**D. Claim 24 was rejected as unpatentable over Stankewitz in view of Schubert in further view of Tomisawa**

The rejection of claim 24 as unpatentable over Stankewitz in view of Schubert in further view of Tomisawa is traversed. In order to maintain such a rejection, each and every element of the claim must be taught or suggested by the reference.

Claim 24 depends directly from claim 21 and is therefore patentable over the prior art for at least the same reasons.

Additionally, Stankewitz teaches away from the combination with Schubert and Tomisawa for similar reasons as outlined above. Stankewitz teaches the desirability of a method that shortens the period of time for creating optimum call conditions and *does not necessitate any major technological or computational expense*. See, ¶5 of Stankewitz (emphasis added). The combination with Schubert and Tomisawa, requiring computations for the current position of the vehicle and a geo-referenced map as well as calculating the characteristics of a sound wave having approximately the same amplitude and phase shifted 180 degrees from an air intake sound wave, then generating the sound wave with a sound wave generator (see abstract, Tomisawa) would then necessitate a major technological or computation expense (providing equipment to determine a current position, such as a GPS unit, and compare that position to a geo-referenced map as well as a sound wave generator and means to calculate the characteristics of the sound wave to be generated) would defeat the purpose of Stankewitz. Any such modification would destroy the principle of operation of Stankewitz by requiring additional equipment and computations. See, MPEP §2143.01, *In Re Ratti*, 270 F.2d 810 (CCPA 1959).

Withdrawal of the rejection to claim 24 is requested.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 12 of 15

**E. Claims 23 and 27 were rejected under 35 U.S.C. §103(a) as unpatentable over Stankewitz in view of Schubert in view of Venkatesh**

The §103(a) rejection of claims 23 and 27 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

Additionally, Stankewitz teaches away from the combination with Schubert and Venkatesh for similar reasons as outlined above. Stankewitz teaches the desirability of a method that shortens the period of time for creating optimum call conditions and *does not necessitate any major technological or computational expense*. See, ¶5 of Stankewitz (emphasis added). The combination with Schubert and Venkatesh, requiring computations for the current position of the vehicle and a geo-referenced map as well as filters, echo cancellers, gain control signals based on vehicle speed, controlling gains of a dither signal (see abstract, Venkatesh) would then necessitate a major technological or computation expense (providing equipment to determine a current position, such as a GPS unit, and compare that position to a geo-referenced map as well as echo cancellers and gain controls) would defeat the purpose of Stankewitz. Any such modification would destroy the principle of operation of Stankewitz by requiring additional equipment and computations. See, MPEP §2143.01, *In Re Ratti*, 270 F.2d 810 (CCPA 1959).

Additionally, claims 23 and 27 depend directly from claim 21 and are therefore allowable for at least the same reasons as claim 21.

Withdrawal of the rejections to claims 23 and 27 is requested.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 13 of 15

**F. Claim 25 was rejected under 35 U.S.C. §103(a) as unpatentable over Cairns in view of Schubert in view of Grivas**

The §103(a) rejection of claim 25 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

Claim 25 depends from claim 21 and is therefore allowable for at least the same reasons as claim 21.

**G. Claim 28 was rejected under 35 U.S.C. §103(a) as unpatentable over Cairns in view of Schubert in view of Grivas**

The §103(a) rejection of claim 25 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

As noted above, there can be no motivation to combine the references, as Cairns unequivocally teaches away from the combination. As Cairns teaches in ¶12, the term vehicle conditions "is intended to *exclude* characteristics not related to the physical mechanical/electrical condition of the vehicle" (emphasis added). The Examiner's allegation that an external vehicle climate is a physical or mechanical condition of the vehicle is specious – an external vehicle climate is not a condition of the *vehicle*, but rather the environment experienced by the vehicle while traveling on a road. Since Cairns explicitly teaches that the term is specifically intended to exclude characteristics not related to the *condition of the vehicle*, the Examiner cannot combine these references.



January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 14 of 15

The Applicant traverses the Examiner's statement that claims "28, 30, 33, 35, and 36 are met." Applicant does not understand what the Examiner is alleging, and in any event, it would appear that such an allegation is either irrelevant or, at best, not founded in law. The Examiner is reminded of the salutary benefits of providing a complete response and the benefits of providing a designation of the particular part of a reference relied upon in a rejection. See, MPEP §707, 37 C.F.R. §1.104. Additionally, Applicant reminds the Examiner that the goal of examination is to clearly articulate any rejection early in the examination process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply competently at the earliest opportunity. See, MPEP §706.

With respect to claims 31 and 32, Applicant traverses the statement that "it was obvious to use a call center to determine a road input based on a received GPS location and database and to send that road input to the mobile vehicle for noise suppression." Again, the Examiner is using Applicant's own disclosures against her using impermissible hindsight.

Withdrawal of the rejection to claims 28, 31, and 32 is requested. In the event that "met" means "rejected", Applicant also requests withdrawal of the "rejection" to claims 30, 33, 35, and 36.

**H. Claims 29 and 34 were rejected under 35 U.S.C. §103(a) as unpatentable over Cairns in view of Schubert in view of Grivas in further view of Venkatesh**

The §103(a) rejection of claims 29 and 34 is traversed. To maintain this §103(a) rejection, the references, alone or in combination must teach or suggest each and every element of the claims.

Claim 29 depends from claim 28 and claim 34 depends from claim 33, and claims 29 and 34 are therefore patentable for at least the same reasons as claims 28 and 33 respectively.

Withdrawal of the rejections to claims 29 and 34 is requested.

January 6, 2006  
Case No.: GP-304038 (2760/158)  
Serial No.: 10/784,569  
Filed: February 23, 2004  
Page 15 of 15

**SUMMARY**

The Examiner's rejections of claims 21 and 23-36 have been obviated by the remarks herein supporting an allowance over the prior art. The Applicant respectfully submits that claims 21 and 23-36 herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Dated: January 6, 2006

Respectfully submitted,  
UMA ARUN

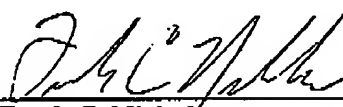
GENERAL MOTORS CORPORATION  
General Motors Legal Staff  
Mail Code 482-C23-B21  
300 Renaissance Center  
P.O. Box 300  
Detroit, MI 48265-3000  
Phone: (313) 665-4714

---

Anthony Luke Simon  
Registration No. 34,434  
Attorney for Applicant

CARDINAL LAW GROUP  
Suite 2000  
1603 Orrington Avenue  
Evanston, Illinois 60201  
Phone: (847) 905-7111  
Fax: (847) 905-7113

---



Frank C. Nicholas  
Registration No. 33,983  
Attorney for Applicants